Art. XI.—*On Australian and Tasmanian Coleoptera, with Descriptions of New Species. Part I.*

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(With Plate XXX).

[Read 9th September, 1909].

In Masters' Catalogue of Australian Coleoptera 7201 species of beetles are listed. Since then about 6000 additional species have been described or recorded; but probably considerably over 10,000 species remain to be treated.

The large and showy species have been comparatively well worked out, at any rate from the more settled districts. But the desert portions of Australia, containing in favourable seasons many large and handsome species, have been hardly touched for insects. Many extremely rich parts of Queensland have never been systematically collected in, or even traversed by collectors. The Northern Territory and N.W. Australia, except for a slight fringe of coastal country, have been practically untouched.

When we come to the families of small and obscure species, however, it is no unusual circumstance for an entomologist to find that in his collection is a greater number of species than is recorded for the entire family he may be working at. And at least two collections in Australia (the Macleay Museum and my own) contain more species than are recorded for the whole of the continent.

The nests of ants, bees and termites, on careful examination, yield many singular forms of beetles; but probably less than a dozen entomologists have systematically examined such nests in Australia.

Species are numerous at the roots of beach-growing plants, but not one has been recorded from the whole of the tropical portions of Australia, except a few from the north-west.

Mosses and lichens are extraordinarily productive of beetles, of small size mostly, but many of great beauty or singular form. And yet most collectors never even cursorily examine moss, let alone tear it to pieces or sieve it over white paper.

Tussocks of grasses and sedges are also very productive in autumn and winter, and are usually neglected by collectors. As are also fallen leaves in forests.

Of our common trees the casuarinas produce many species that are found on no others; the genus *Misophrice*, for instance, is practically confined to them. Several entomologists have carefully searched for species of this genus in N.S. Wales, S. and W. Australia, and Tasmania, with the result that numerous species have been recorded from those States. But from north of the 29th deg. apparently not a single species has been taken; and yet it is probable that in the northern parts of the continent they are at least as numerous as in the southern.

In New Zealand many beetles are to be obtained in the dead fronds of the larger ferns; but this source has been practically untouched in Australia.

Breeding, except for a few species of economic importance, is also a neglected source of specimens. A few grubby sticks of even our common wattle and gum trees will often yield beetles in abundance that are seldom or never found in the open. Even such highly important timber-destroying species as the *Scolytidae* have been neglected; plain proof of this being the description or record, in the present paper, of a greater number of species than all hitherto recorded from Australia.

Of other families that have been more or less neglected there may be mentioned *Hydrophilidae, Staphylinidae, Pselaphidae, Scydmaenidae, Silphidae, Trichopterygidae, Phalacridae, Cryptophagidae, Dermestidae, Elateridae, Dascillidae, Ptinidae, Cistelidae, Melandryidae, Anthicidae* and *Corylophidae;* and several sub-families of *Chrysomelidae* and *Curculionidae.* And it may be taken for granted that any entomologist desirous of describing new species would be certain of finding such species in even a small collection of any of the families mentioned, whilst new species are far from being exhausted even in such showy groups as the *Cicindelidae, Buprestidae, Cerambycidae* and *Cetonides.*

STAPHYLINIDAE.

Calodera tenuicornis, n. sp.

Reddish-testaceous, elytra and abdomen somewhat darker, base of abdomen paler than apex, tibiae darker than femora or tarsi, antennae infuscate except at base and apex. Moderately densely clothed with short greyish pubescence, sparser and longer on abdomen than elsewhere; sides of abdomen with moderately long brownish hairs.

Head densely and finely punctate. Antennae rather long, first joint almost as long as second and third combined, second distinctly longer than third, the others decreasing in length to tenth, but none transverse, eleventh almost as long as ninth and tenth combined. *Prothorax* about twice as wide as long, base and sides rounded, base considerably wider than apex; punctures rather sparse and very small. *Elytra* about as long as head and prothorax combined, at base wider than the latter, the width increasing to apex, each inwardly oblique to suture at apex; densely and rather finely punctate. *Abdomen* almost parallel-sided to apical segment; rather sparsely and irregularly punctate. Length $3\frac{1}{4}$, to apex of elytra $1\frac{1}{2}$ mm.

Hab.—N.S. Wales: Dalmorton.

In outline somewhat like *inaequalis*, but the punctures very much finer and the joints of the antennae differently proportioned.

Calodera marginicollis, n. sp.

Reddish-testaceous, middle of antennae slightly darker, apical half of elytra (except the apical angles) and the fifth abdominal segment piceous; metasternum slightly infuscate. Moderately clothed with rather short yellowish pubescence, longer and sparser on abdomen than elsewhere.

Head subopaque, indistinctly punctate. Antennae stout, first joint almost as long as second and third combined, these two subequal in length, third feebly, fourth to tenth strongly transverse, eleventh briefly subconical. *Prothorax* about once and one-third wider than long, base and apex almost equal, sides rounded, but towards base directed slightly outwards, the pos-

terior angles almost right angles; densely and moderately coarsely punctate, with a shallow but distinct median line. *Elytra* wider than prothorax and about once and one-half as long, not much wider at apex than at base, each separately rounded at apex; punctures rather coarser and sparser than on prothorax. *Abdomen* almost parallel-sided to apical segment; densely coarsely and irregularly punctate, four basal segments each with a deep transverse sulcus at base. Length 2¼, to apex of elytra 1 mm.

Hab.—W. Australia: Bridgetown.

A specimen from Karridale differs in being considerably paler, with a patch at the outer apex of each elytron, and the fifth abdominal segment rather lightly infuscate. The species appears somewhat out of place in *Calodera*, but it is certainly congeneric with *eritima*.

Calodera rufipennis, n. sp.

Red; head, abdomen (except apical half of the subapical and the whole of the apical segments) meso and metasternum piceous or black; antennae piceous, three (or four) basal joints paler; femora slightly infuscate. Moderately clothed with rather short yellowish pubescence, sparser on metasternum and upper surface of abdomen than elsewhere.

Head (for the genus) rather coarsely punctate; joints of antennae as in the preceding species, except that the fifth to tenth are decidedly more transverse. *Prothorax* about once and one-half as wide as long, base and sides rounded, base not much wider than apex; punctures evenly distributed and rather coarse. *Elytra* slightly wider and (along suture) not much longer than prothorax, apex not much wider than base, each separately rounded at apex; punctures coarser than on prothorax. *Abdomen* almost parallel-sided to apical segment; moderately coarsely and somewhat irregularly punctate; four basal segments with a strong transverse impression at base. Length 2¼, to apex of elytra 1 mm.

Hab.—W. Australia: Pinjarrah.

In general appearance somewhat like a small *Aleochara*.

Calodera alternans, n. sp.

Bright-red; head sometimes slightly darker than prothorax, elytra (usually obscurely diluted with red along suture and apex) and four apical segments of abdomen piceous or black; legs testaceous, antennae reddish-brown, the basal joints paler. Rather sparsely clothed with greyish-yellow pubescence, sides with moderately long hairs.

Head with distinct but rather sparse and small punctures. Antennae moderately long; first joint not much longer than second, second and third subequal, fourth and fifth feebly, sixth to tenth more distinctly transverse, eleventh as long as the two preceding combined. *Prothorax* about once and one-half as long as wide, base moderately, the sides more noticeably rounded, base scarcely wider than apex; disc with a large shallow impression towards base; with moderately large but not very regularly distributed punctures. *Elytra* distinctly wider than, and about once and one-third the width of prothorax, sides parallel, each feebly separately rounded at apex; punctures coarser than on prothorax, and almost regular. *Abdomen* parallel-sided to apical segment, with strong punctures only in a distinct transverse impression at the base of each segment. Length $3\frac{1}{4}$, to apex of elytra $1\frac{1}{2}$ mm.

Hab.—W. Australia: Bridgetown, Swan River.

In the (four) specimens under examination the prothorax appears to be flattened or very slightly excavated for about a third of its width from the base, but much less towards the apex, the part affected being almost pear-shaped.

Calodera microps, n.sp.

Testaceous-red, legs paler, abdomen piceous except the apical third of the three basal segments, extreme apex of the fourth, apical half of the sixth and the whole of the seventh; antennae piceous-brown, the basal joints (and the apical to a slight extent) paler; base of metasternum clouded with brown. Rather sparsely clothed with moderately short golden pubescence.

Head longer than wide, with rather small and sparse punctures. Antennae as in the preceding species, except that the

eleventh joint is distinctly longer than the two preceding combined. *Prothorax* rather more convex than usual, sides rounded, base scarcely, if at all, wider than apex; densely and moderately strongly punctate, with a shallow transverse impression in the middle of the base. *Elytra* wider than, and about once and one-fourth the length of prothorax, shoulders rounded, sides parallel behind them, each feebly separately rounded at apex; densely and coarsely punctate, the punctures much smaller posteriorly. *Abdomen* parallel-sided to apical segment, with coarse punctures only in a distinct transverse impression at the base of each segment. Length 3 (vix), to apex of elytra $1\frac{1}{4}$ mm.

Hab.—Victoria: Emerald.

A small narrow species not very close to any with which I am acquainted; it should perhaps be placed near *inaequalis*. The eyes are smaller and much less prominent than is usual in the genus.

Calodera inaequalis, Fvl.

A specimen from Bunbury (W.A.) under examination appears to represent a variety of this species (I have typical specimens from New South Wales and Tasmania). It differs from the normal form in being smaller, narrower and paler, the median line on the prothorax scarcely pronounced (except at base), with the punctures everywhere sparser and much smaller.

Calodera erttima, Oll.

A specimen from Benalla (Victoria) agrees exactly with the description of this species; two others from Albury (N.S. Wales) differ in having a distinct spot on each side of the elytra, in addition to the basal one; another from Hobart (Tasmania) has the lateral spots also, but they are obscurely connected with the basal one. The specimens from Albury and Hobart also have the fourth abdominal segment almost as dark as the fifth.

Conosoma barycephalum, n. sp.

Shining. Reddish-testaceous, appendages paler; suture narrowly infuscate. Clothed with short golden pubescence, longer on abdomen than elsewhere; a rather long black hair on each

side of apex of elytra and of each of the abdominal segments; the two apical segments, however, with numerous hairs.

Antennae comparatively short.[1] *Prothorax* large, strongly convex, moderately transverse, closely enveloping the head, posterior angles rounded but produced and enveloping the elytra; indistinctly punctate. *Elytra* narrower than prothorax at base and much narrower at apex, posterior angles strongly rounded, shorter along suture than towards sides, rapidly diminishing in vertical height from base to apex, sides just perceptibly projecting outwards and downwards; densely and finely punctate. Length 3, to apex of elytra $1\frac{1}{3}$ mm.

Hab.—W. Australia: Bridgetown.

A very distinct species, appearing top-heavy from the unusually large and convex prothorax and peculiar elytra; the punctures and pubescence of the latter are very sparse in the vicinity of the scutellum. Numerous specimens were seen in the nest of a species of "sugar" ant under a stone.

Conosoma myrmecophilum, n. sp.

♂. Moderately shining. Dull reddish-testaceous, appendages paler; base of prothorax, apex of elytra and middle of abdomen slightly infuscate. Densely clothed with short and somewhat golden pubescence, longer on abdomen than elsewhere; front of head, sides of prothorax, elytra and abdomen with long brownish or blackish hairs, denser on abdomen than elsewhere.

Antennae rather stout, fifth to tenth joints transverse, eleventh almost as long as three preceding combined. *Prothorax* decidedly transverse, base gently emarginate throughout; indistinctly punctate. *Elytra* comparatively large, outline continuous with that of prothorax, and not much wider at base than at apex, slightly longer than prothorax; apex truncate, the posterior angles very slightly rounded; sides slightly flattened out but not upturned; with dense subasperate punctures. Subapical segment of *abdomen* deeply triangularly excised. Length 3, to apex of elytra $1\frac{1}{3}$ mm.

Hab.—W. Australia: Swan River.

1 Although I have now four specimens, I have not been able to place the antennae of any of them in a satisfactory position for close examination.

Although at a glance this species has a very commonplace appearance, it is not very close to any with which I am acquainted, and the long terminal joint of the antennae should render it easy of recognition. The long hairs on the head and prothorax are scarcely half the length of those on the elytra and abdomen, and are visible with difficulty from certain directions. The unique specimen under examination was taken from an ants' nest.

Consoma bipartitum, n. sp.

♀. Shining. Testaceous-red, head (muzzle excepted) glossy black; metasternum and abdomen infuscate, two apical segments and the apex of each of the others paler; legs and antennae reddish-testaceous, base of antennae and the palpi paler. Clothed with short golden pubescence, longer on abdomen than elsewhere; sides of the latter with long brownish or blackish hairs, becoming rather numerous on the two apical segments.

Antennae rather long; sixth to tenth joints transverse, eleventh scarcely as long as two preceding combined. *Prothorax* strongly transverse, base truncate; with sparse and indistinct punctures. *Elytra* slightly narrower and slightly longer than prothorax, the sides slightly upturned and diminishing in width from shoulders to apex, shortest along suture, posterior angles scarcely rounded; with moderately dense, subasperate punctures. Length 3¼, to apex of elytra 1¾ mm.

Hab.—Victoria: Emerald.

A rather depressed species somewhat resembling *triangulum*, but flatter, the elytra differently coloured and the antennae different, the six terminal joints being considerably flatter than is usual; in general appearance it closely resembles *sertum*, but besides being rather narrower it may be at once distinguished from that species by its parti-coloured head.

Conosoma orthodoxum, n. sp.

♀. Shining. Dark reddish-testaceous; head (muzzle excepted) almost black; elytra, sterna and abdomen clouded with piceous, the apical segments and the apex of each of the others paler; legs clear reddish-testaceous; antennae infuscate, their

basal joints and the palpi considerably paler. Clothed with short golden pubescence, longer and somewhat sparser on the apical half of each of the abdominal segments than elsewhere; apical segments with long blackish hair.

Antennae moderately long, sixth to tenth joints transverse, eleventh decidedly shorter than the two preceding combined. *Prothorax* moderately transverse, base almost truncate; indistinctly punctate. *Elytra* slightly narrower and slightly longer than prothorax, slightly shorter along suture than towards sides; sides almost straight, the margins narrowly upturned; posterior angles feebly rounded; rather densely and finely punctate. Length $3\frac{1}{4}$, to apex of elytra $1\frac{1}{2}$ mm.

Hab.—W. Australia: Karridale.

In appearance somewhat resembling *triangulum*, but narrower, the elytra unicolorous, and the apical segments only with long hairs; from *impenne*, which it resembles in colour, it differs in its much shorter and stouter antennae and longer elytra.

Conosoma tertium, Lea.

This appears to be a variety of *acticum* judging from a Tasmanian example of the latter.

Conosoma elongatulum, Macl.

I am inclined to regard this name as a synonym of *fumatum*.

C. australe, Er.

Hab.—Tasmania, Victoria.

C. eximium, Oll.

Hab.—Swan River.

C. nonum, Lea.

Hab.—W.A.: Donnybrook.

Quedius mediofuscus, n. sp.

Reddish-castaneous, head infuscated between eyes. Head and prothorax glabrous except for a few long hairs at the sides;

elsewhere with comparatively long and sparse pubescence, sides and apex of abdomen with long hairs.

Head, including neck, distinctly longer than wide, without it just about as long as wide; upper surface with two setiferous punctures close to each eye, and four close to the neck. Antennae extending to base of prothorax, first joint as long as second and third combined, these subequal in length, the others to the tenth gradually decreasing in length, but only the eighth-tenth distinctly transverse. *Prothorax* with sides and base strongly rounded, with a few marginal setiferous punctures at sides, base and apex, and two simple ones on disc. *Elytra* lightly transverse; with small and comparatively sparse punctures. *Abdomen* with sparse but not very small punctures, becoming small posteriorly, and absent at base of three first segments. Basal joint of middle *tarsi* stout, and with a blackish upper rim. Length 7, to apex of elytra 3 mm.

Hab.—Tasmania: Mount Wellington (A. M. Lea).

In general appearance close to *xylophilus*, but more robust, elytra concolorous with prothorax and abdomen, and with decidedly sparser punctures on both elytra and abdomen. There are two specimens before me, both apparently males.

Lithocharis tenuicornis, n. sp.

Depressed, subopaque. Dull testaceous, legs paler, upper surface of head piceous. Clothed with short greyish pubescence, a few long hairs at the sides and at the apex of abdomen. Densely and finely punctate all over.

Head large. Antennae thin, passing base of prothorax, first joint as long as second and third combined, second almost as long as third and fourth combined, fourth to tenth feebly decreasing in length but none transverse, eleventh thinner and distinctly longer than tenth. *Prothorax* transverse, narrower than head, apex wider than base, anterior angles feebly, the posterior strongly rounded. *Elytra* wider than, and about once and one-third longer than prothorax, sides feebly increasing in width to apex, each slightly rounded and inwardly oblique to suture at apex. *Abdomen* parallel-sided to about middle, thence decreasing rather rapidly in width to apex. Length 2, to apex of elytra 1 mm.

Hab.—N.W. Australia: Upper Ord River (R. Helms).

In general appearance much the same as *tristis*, but the size much smaller, the head considerably larger and the prothorax decidedly transverse.

Lithocharis tristis, Macl.

No part of this insect could fairly be called "black." Its darkest part (the upper surface of the head) is piceous-brown. I have specimens from the Clarence and Hawkesbury Rivers.

Bledius semicircularis, n. sp.

Piceous-black, apex and sides of elytra and appendages flavous, tibiae and terminal joints of antennae slightly infuscate. Clothed with moderately long whitish pubescence, becoming golden on head and abdomen, on the latter longer and sparser than elsewhere.

Head with moderately small and rather sparse punctures, and with dense minute punctures; antennary tubercles prominent and tipped with red. Clypeus with denser punctures than elsewhere, its sutures distinct. Antennae rather long, first joint almost as long as the second to fifth combined, second as long as the third and fourth combined. *Prothorax* moderately transverse, subcordate, base largely and suddenly narrowed, with a narrow and moderately deep continuous median line; with small depressed minutely punctured granules, the interspaces of equal size and equally punctate. *Elytra* wider and about once and one-fourth longer than prothorax, sides parallel, each feebly separately rounded at apex; densely and moderately finely punctate. *Abdomen* feebly dilated from base to beyond middle, each segment very feebly transversely corrugated and sparsely punctate, the margins distinctly punctate; under surface scarcely corrugated, but with dense minute punctures, in addition to the small ones. Length 5, to apex of elytra 3 mm.

Hab.—Queensland: Brisbane (A. J. Coates).

The shape and punctures of the prothorax and colour of the elytra should render this a remarkably distinct species. The prothorax can scarcely be called granulate, though from some directions it appears to be so, the elytral punctures cause a some-

what similar (but much less pronounced) appearance. The darker part of the elytra is semicircularly bounded by the paler, the two colours being very sharply defined; the shoulders, however, are diluted with flavous.

Bledius parvulus, n. sp.

Piceous-brown, elytra red or piceous-red, the legs paler, antennae infuscate, the basal joints paler. Clothed with rather sparse greyish pubescence, rather longer and decidedly sparse on abdomen than elsewhere.

Head rather large; indistinctly punctate; antennary tubercles feeble. Clypeus with indistinct sutures. Antennae moderately long, first joint almost as long as the second to fifth combined, four terminal joints rather stouter than usual. *Prothorax* rather strongly transverse, base largely but not suddenly narrowed; with a narrow and moderately distinct median line; with moderately dense and comparatively small punctures, the interspaces densely and minutely punctate. *Elytra* distinctly wider than and about once and one-half the length of prothorax, sides subparallel to near apex, each feebly separately rounded; densely, strongly and almost regularly punctate. *Abdomen* almost parallel-sided to near apex, scarcely visibly punctate and transversely corrugated. Length 2, to apex of elytra 1 mm.

Hab.—W. Australia: Beverley, Pinjarrah.

In general appearance much resembling *mandibularis*, but not half the size of that species.

B. aterrimus, Fvl.

Hab.—N. S. Wales, W. Australia.

B. phytosinus, Fvl.

Hab.—Sydney, N. S. Wales.

B. mandibularis, Macl.

Hab.—Windsor, Tamworth, N. S. Wales.

B. caroli, Blackb.

Hab.—S. Australia.

B. minax, Blackb.

Hab.—Vasse, W. Australia.

B. insignicornis, Blackb.

Hab.—Victoria.

Sartallus signatus, Sharp.

Hab.—Sydney, N. S. Wales.

Trogophlaeus apicirufus, n. sp.

Very narrow and subopaque. Piceous-black, prothorax and antennae obscure reddish-brown, apex of elytra somewhat paler, legs pale testaceous. Rather sparsely clothed with very short greyish pubescence.

Head densely but very indistinctly punctate, a shallow impression on each side in front, antennary tubercles not prominent. *Prothorax* lightly transverse, subcordate, moderately convex: a feeble impression on each side of middle terminated some distance before apex, and towards base terminated in a very feeble transverse impression; densely and finely punctate. *Elytra* considerably wider than, and about once and one-half the length of prothorax, each inwardly oblique to suture at apex; punctures stronger than on prothorax. *Abdomen* almost parallel-sided to near apex: densely and finely punctate. Length $1\frac{1}{3}$, to apex of elytra $\frac{2}{3}$ mm.

Hab.—N.S. Wales: Clarence River.

The tip of the elytra is red as in *adelaidae*, but the size is much smaller (Mr. Blackburn gives the length of his smallest specimen of *adelaidae* as $2\frac{1}{2}$ mm.), and the prothorax is differently sculptured.

Trogophlaeus noctivagus, n. sp.

Narrow, depressed, opaque. Black, prothorax and elytra piceous-black; legs piceous, base and apex of tibiae and the tarsi paler, antennae infuscate but paler towards base. Densely clothed with very short, greyish pubescence. Densely and finely punctate throughout.

Head with a very shallow longitudinal impression on each side in front, antennary tubercles feeble. *Prothorax* feebly or not at all transverse, apex distinctly (but not much) wider than base, each side of middle with a feeble longitudinal impression. *Elytra* flat, considerably wider than, and about once and one-half the length of prothorax. *Abdomen* increasing in width from base to near apex. Length $1\frac{1}{4}$, to apex of elytra $\frac{2}{3}$ mm.

Hab.—W. Australia: Swan River, Beverley.

Differs from *exiguus* in having moderately distinct prothoracic impressions; the elytra rather longer and with smaller punctures, the abdomen less parallel-sided and the legs darker. All the (numerous) specimens under examination were obtained at lights. The impressions on the prothorax sometimes appear as two regular longitudinal depressions; they are, however, frequently interrupted, when each appears as two shallow foveae; in two specimens they are conjoined so that a large part of the disc is slightly concave.

Trogophlaeus pictipes, n. sp.

Comparatively wide, depressed, opaque. Of an uniform piceous-black, antennae scarcely paler, base and apex of tibiae and the tarsi testaceous. Densely clothed with short greyish pubescence, becoming moderately long on the sides of prothorax and head and on the sides and apex of each of the abdominal segments.

Head densely and minutely punctate, a scarcely traceable longitudinal impression on each side in front; antennary tubercles moderately large and indistinctly tipped with red. *Prothorax* moderately transverse, subcordate, apex much wider than base, with a very feeble and indistinct median line; moderately densely and finely punctate, the interspaces densely and minutely punctate. *Elytra* flat, considerably wider than prothorax and about as long as head and prothorax combined; punctures as on prothorax, except that the larger punctures are sparser and less clearly defined. *Abdomen* feebly increasing in width from base to beyond middle, densely and very finely punctate, apex of sixth segment feebly and widely emarginate both above and below. Length $3\frac{1}{2}$, to apex of elytra 2 mm.

Hab.—Tasmania: Hobart.

A comparatively large species, in appearance somewhat like *bilineatus*, but larger, less shining, the prothorax less transverse and without discal impressions, and the punctures of both prothorax and elytra smaller and different in character.

Trogophlaeus punctatus, Fvl.

I have typical specimens of this species from New South Wales and Tasmania. Some specimens from West Australia differ to a slight extent in having a more distinct median elevation on the prothorax and on each side of the elevation a distinct but slightly interrupted longitudinal impression; in typical specimens each of these impressions appears almost as two foveae.

A specimen from Windsor (N.S.W.) differs in having the elytra of a rather bright red; it is probably immature.

T. adelaidae, Blackb.

Hab.—S. Australia.

T. exiguus, Er.

Hab.—T., N.S.W.

T. bilineatus, Steph.

Hab.—W.A.: Vasse, Beverley, Swan River.

T. simplex, Motsch.

Hab.—Q., N.S.W., W.A.

Cucujidae.

Dryocora.

The Rev. T. Blackburn has called my attention to the fact that *Dryocora* and *Bessaphilus* are synonymous. *D. walkeri*, Lea, seems close to *B. cephalotes*, Waterh., but differs from the description of that species in being without the least stains of piceous (except occasionally at the apex of the prothorax); the punctures of the upper surface, though small, are certainly not

"very fine," and the space between the lateral carina and the margin is longitudinally convex.

Dryocora was proposed in 1868, *Bessaphilus* in 1877; the latter name must therefore fall. *Adelostella* has already been noted as synonymous with *Dryocora*.

Lathropus strigiceps, n. sp.

Apparently glabrous, shining. Brownish-red, head, sides (and sometimes base) of prothorax and suture more or less clouded with black.

Head longer than wide; densely punctate, the punctures (especially towards the sides) frequently confluent; a moderately feeble transverse impression behind eyes, median line absent, but punctures less crowded along middle. Antennae not extending to base of prothorax, first joint stout, almost as long as second and third combined, third to eighth subglobular, ninth and tenth wider, eleventh ovate, slightly wider than tenth. *Prothorax* longer than wide, sides very feebly rounded, apex considerably wider than base; densely and rather coarsely punctate, punctures finer along middle than at sides, sides unistriate. *Elytra* each with about six striae, of which the first, third and fifth are more distinct than the others; suture scarcely visibly punctate, elsewhere with fine and almost regular punctures. Length 2-3 mm.

Hab.—Tasmania: Huon River, Hobart, New Norfolk.

The sides of the head (especially in the male) appear to be strigose in consequence of the punctures running together. Except from certain directions the whole of the upper surface (except the apex of prothorax) appears to be glabrous; on close inspection from certain directions, however, exceedingly fine greyish pubescence becomes visible (the same is the case with the following species). In one specimen the prothorax appears to be supplied with a feeble impunctate median line. From *L. brightensis* its larger size and the entire absence of a dorsal prothoracic carina should readily distinguish it.

Lathropus piceicollis, n. sp.

Apparently glabrous, shining. Reddish, prothorax (and head to a less extent) piceous.

Head densely punctate, median line not traceable. Antennae terminated before base of prothorax, first joint stout, the length of second and third combined, third to tenth transverse, the ninth and tenth noticeably wider than the preceding ones, eleventh briefly ovate, not much longer than tenth. *Prothorax* and *elytra* as in the preceding species. Length 1½ mm.

Hab.—N.S. Wales: Sydney.

In general appearance very close to the preceding species, but smaller, head differently coloured, eyes larger and elytra much paler. From *brightensis* its differently coloured elytra and non-carinated prothorax should readily distinguish it.

Lucanidae.

Neolamprima mandibularis, Macl.

This beautiful insect is common at Kuranda and in several other parts of North Queensland, and it varies to a remarkable extent in the mandibles of the male, and the colours of the female. Mr. Henry Hacker first informed me of the great variability of the species, and I have since heard from Messrs. Edmund Allen and J. A. Anderson to the same effect. From all three, also, I have received numerous specimens, sent as belonging to one species.

In sending a series Mr. Hacker wrote:—"With regard to *Neolamprima mandibularis*. The series sent is selected from over 80 specimens which I took near the Clohesy River, about 12 miles from Kuranda. I caught them all in two days in the same locality, *i.e.*, in a clearing in the scrub. They were all taken either flying in the hot sunshine or copulating on rotten logs. I could have taken a hundred more at the same time, had I wanted them. On examining a series of males there seem to be three well-defined forms of mandibles, long, medium and short, rather more than a gradual merging from long to short. The males do not vary much in colour, but the females vary from a deep blue, through various shades of green, to brassy red. I am perfectly convinced in my own mind that the above series represent but one species."

To judge from the examples sent by the three entomologists named, the commonest form of the male has the mandibles

fairly short (although somewhat longer than in other species of *Lamprima*), with but one tooth on the lower surface of each. In this form (which is quite a typical *Lamprima*) the mandibles are about three-fifths of the length of the prothorax.[1] The greatest length of the mandibles that I have seen is about twice the length of the prothorax.

Mr. H. H. D. Griffith has a specimen from Kuranda with the left mandible of the normal (*i.e.*, comparatively short) form, and the right noticeably longer than the prothorax. I have a similar specimen from Cairns.

Following are given (in millimetres) some lengths of the males and their mandibles, with the number of teeth on the lower surface of each mandible.

Lengths of Mandibles.[2]	Rest of Body.	Teeth on lower surface of Mandibles.
4	17	1
5	23	1
6	25	1
6	26	1
6 and 9[3]	23	1 and 6
$6\frac{1}{4}$ and $8\frac{3}{4}$[3]	$26\frac{1}{2}$	1 and 8
$6\frac{1}{2}$ and 7	26	2 and 3
6 and $6\frac{1}{4}$	26	2 and 3
$5\frac{1}{2}$	$22\frac{1}{2}$	4 and 5
7	$26\frac{1}{2}$	3 and 4
$8\frac{1}{2}$	$19\frac{1}{2}$	8 and 11
10	24	6 and 9
$10\frac{1}{2}$	28	8 and 9
$12\frac{1}{2}$	28	8 and 11

The three terminal teeth also vary; the one at a slight distance from the apex on the upper surface is usually directed straight up, but sometimes curves slightly inwards, sometimes backwards and inwards, or backwards and outwards; in two specimens it is directed obliquely forwards. The median one of

1 A specimen of this form is standing in the Macleay Museum, under the name of *splendens*, Er.

2 Taken in a straight line and on the upper surface.

3 The specimens with uneven mandibles; if measured along their curves the differences would be still more pronounced.

the three is usually nearer the terminal one than the one near the apex, but is sometimes midway.

The females (excluding the mandibles) vary in length from 15 to 20 mm., and Mr. Hacker has well described their variation in colour, but the head is always of the same fiery red as that of the male.

A specimen with long mandibles was sent to Dr. Gestro for comparison with *N. adolphinae*, and in reply he stated:—"I have compared it with the types of *N. adolphinae;* the differences are only slight, notwithstanding they are sufficient to distinguish the two species (or the two races). The species from Mt. Arfak is less polished, the mandibles are not so robust, and the punctures of the prothorax are slightly different."

Lamprima aurata, Latr., var. *mariae*, n. var.

♂. Purple; parts of under surface metallic coppery green.

♀. Coppery-purple with violet reflections; under surface coppery red.

Hab.—Tasmania: Maria Island (W. F. McCulloch).

Mr. McCulloch has given me six specimens of each sex of this beautiful variety, all taken from old roots of "Stringy-bark" during grubbing operations.

The head is usually of the same colour as the general surface, but occasionally has a metallic green gloss. The legs of the male are mostly purple, but the tarsi are more or less metallic blue, and the femora usually have a coppery gloss. The legs of the female are beautifully variegated from a fiery red to deep purple, with brilliant greens and blues.

As I am unable to find any structural differences between the present form and *aurata*, it is simply described as a variety of that species. It is, however, quite as distinct from the typical form of that species as is *rutilans*. Some of the specimens seem to have a tendency to the deep coppery red of that variety.

Cleridae.

Allelidea? brevipennis, Pasc.

There are two Victorian specimens which I refer with some doubt to this species. In both the tarsi are dark (almost

black), whilst the tibiae are variable; in one one-third, in the other two-thirds at the base are dark, the rest being reddish-yellow. Pascoe describes the type as having yellow tarsi, the tibiae not being mentioned. As the legs are certainly variable in colour in two other species, it would be unsafe, therefore, to describe these specimens as new, without additional information about the type. In these specimens the dark portion of the elytra is almost in the form of a circle.

Allelidea curvifasciata, n. sp.

Black; antennae (club excepted) and parts of legs reddish; elytra with two white fasciae, one basal the other submedian. With sparse but fairly long whitish pubescence.

Head slightly wider than prothorax, with dense and fairly large punctures. Antennae short. *Prothorax* longer than wide, apex wider than base, rather suddenly inflated before the middle, punctures larger than on head. *Elytra* narrower at base than base of prothorax, and its widest portion (which is about the middle) narrower than head; sides at apical fifth finely serrated; punctures denser but scarcely larger than on prothorax, becoming somewhat smaller and sparser posteriorly. *Legs* long and thin. Length 2¼-4 mm.

Hab.—W. Australia: Swan River (A. M. Lea).

On the elytra the basal fascia appears in the form of two triangles, of which the apices meet at the base of the suture; the median fascia does not quite touch the suture, and is usually extended along the sides to about one-fourth from the apex, so as to appear in the shape of two boomerangs. On the legs the parts usually red are the trochanters and the tips of the tibiae; occasionally the red is extended to the middle of the tibiae, but the hind tibiae are sometimes entirely dark. The apex of the elytra is sometimes indistinctly diluted with red. There are seven specimens before me, all of which were taken with the sweep net.

Allelidea quadrinotata, n. sp.

Black; antennae (club excepted), parts of palpi and of tarsi and base of femora obscurely flavous; elytra with four whitish lateral spots.

Head slightly wider than prothorax, with dense and fine punctures in front, sparser and slightly larger elsewhere. Antennae scarcely longer than head is wide. *Prothorax* considerably longer than wide, apex wider than base, rather strongly inflated in middle; with moderately large, subrugose and fairly dense punctures. *Elytra* slightly narrower at base than base of prothorax, its widest portion (which is subapical) narrower than head, apices separately obtusely rounded and not serrated; with denser but not larger punctures than on prothorax. *Legs* long and thin. Length 3⅓ mm.

Hab.—Tasmania: Huon River (A. M. Lea).

On each elytron one spot is beyond the middle, its widest portion on the side and its hind edge curved round so as to meet its front edge about half-way from the suture; the other spot is oblique and subapical. The four, if their inner margins were continued so as to meet, would enclose a somewhat circular space. The under surface of the front tibiae and of the tips of the four hind ones are slightly diluted with red in the unique specimen before me. It was obtained from sedges.

The species of the genus known to me may be tabulated as follows:—

Elytra dark at base	*quadrinotata*, n. sp.
Elytra pale at base	
Elytra not white at apex	*curvifasciata*, n. sp.
Elytra white at apex	
Elytra with a pale median fascia	*ctenostomoides*, Wath.
Elytra without such a fascia	*brevipennis*, Pasc.

Scolytidae.

Crossotarsus mniszechi, Chp.

Mon. Platypides, p. 62, figs. 7 (♂ and ♀), 7a.

Two specimens before me, from Cairns, agree well with the description and figure of the female of this species, and Mr. Hacker had the same species (his 881) from Coen.

The species was originally described from New Guinea, Aru and Celebes. The genus[1] is now first recorded as Australian.

1 Chp., Mon. Platypides, p. 44.

Crossotarsus subpellucidus, n. sp.

♀ (?) Chestnut-brown; antennae, most of elytra of under surface and of legs paler. Head with fairly dense and moderately long golden-brown setae on vertical portion; apex of elytra and coxae with somewhat similar setae; apex and sides of prothorax and under surface with sparse and much shorter setae.

Head with a shining, dark, impunctate line on vertex, declivous portion with fairly numerous punctures of moderate size. *Prothorax* about once and one-half as long as wide; with numerous small punctures nowhere condensed into distinct spots; with a scarcely traceable, impunctate, median line. *Elytra* not much longer than head and prothorax combined; with a fairly distinct subsutural row of punctures, and traces of other rows elsewhere; near apex strongly striated, with the apex itself very finely serrated, and the sides near apex arcuated and finely serrated. Length 4 mm.

Hab.—Queensland: Cairns (E. Allen), Kuranda (H. Hacker).

The elytra, through which the wings can be easily seen, are almost flavous, but with the sides, base and suture slightly stained with brown, and the striated part at apex very dark brown. The abdomen is somewhat darker than the rest of the under surface. Of the legs the knees and tibial ridges are rather darker than the other parts. From some directions the outer angle at the apex of each elytron appears to be composed of two small spines.

There are two specimens before me of both this and the following species, and they have the apex of the elytra with the strong sculpture, that, according to Chapuis, denotes the feminine sex.

Crossotarsus armipennis, n. sp.

(♀ ?). Chestnut-brown; under surface (except abdomen) and appendages (except that the legs are in places infuscated) paler. Vertical portion of head and the coxae with moderately long and somewhat golden setae; apical fourth of elytra, and metasternum, with shorter setae; apex and sides of prothorax with sparse and still shorter setae.

Head with a feeble impunctate median line, becoming dark on vertex; declivous portion with numerous not very conspicuous punctures. *Prothorax* about as long as wide; with very indistinct punctures, nowhere condensed into distinct spots. *Elytra* about twice the length of prothorax; with regular rows of small but fairly distinct punctures; each side of apex with a strong sharp extension, projecting obliquely forwards and downwards; between this and suture a much shorter subtriangular extension. Length 4⅓ mm.

Hab.—N.S. Wales (Macleay Museum).

The tip of the elytra of the female of *saundersi*, as figured by Chapuis, will give a good general idea of the tip of the elytra of this species; but the species differs from *saundersi* in being larger, with the posterior declivity different. In the present species the declivity is almost evenly rounded, opaque, and rather feebly striated.

Platypus cupulatus, Chp.

Mon. des. Platypides, 1865, p. 278, figures 167 (♂ ♀), a, b, c, d.

Mr. C. French, junr., has sent to me several specimens of this species as having been taken (alive) at Melbourne in wood from Java. It was originally described from Borneo.

Platypus solidus, Walker.

Ann. and Mag. Nat. Hist., vol. ii. (3rd ser.), p. 286; Chp. Mon., p. 267, figs. 160 and 160b, c, d.

A female from Cairns appears to belong to this species. It was originally described from Ceylon, but was recorded by Chapuis from Malacca, Celebes, Batchian and Marty. Four varieties are figured by Chapuis, and the Cairns specimen agrees closest to the typical form (figure 160).

Platypus omnivorus, Lea.

Mr. H. W. Cox has taken this species in the Illawarra district, in N.S. Wales.

Notoplatypus, n. g.

Head convex. Eyes prominent and coarsely faceted. With a short but distinct rostrum. Antennae short and rather stout;

funicle four-jointed. *Prothorax* subcylindrical, each side with an impression for the reception of front femur. *Scutellum* absent. *Elytra* elongate, cylindrical, apex roughly sculptured. *Prosternum* elongate in front of tibiae, with a flange-like extension behind. *Mesosternum* with a short extension concealed under flange of prosternum. *Metasternum* very elongate. *Abdomen* with first segment (along middle) shorter than second and third combined, third and fourth with deep sutures, each about as long as second and shorter than fifth. Front *coxae* touching, the others moderately separated ; femora short, stout, compressed and edentate ; tibiae short, serrate ; tarsi long, thin and five-jointed, first and fifth elongate, first distinctly shorter than the rest combined.

The species described below in appearance is something like a long, thin *Platypus*, but is readily distinguished from that genus by the distinct rostrum ; with larger, coarsely faceted and more convex eyes. The front coxae, although large, are much smaller than in *Platypus*. The rostrum, including the mandibles, is twice as wide as long ; in the other genera of the *Platypides* it is much shorter.

The scape is stout ; first joint of funicle concealed within apex of scape, second stout and rather long, third and fourth conjointly strongly transverse and indistinctly separated ; club solid, apparently one-jointed. The scape when removed from the head is about the length of the club and slightly longer than the funicle. The latter, from above, appears to be two-jointed only, and from below three-jointed ; the separation of the third and fourth joints is quite invisible under a Coddington lens.

Notoplatypus elongatus, n. sp.

Reddish castaneous, head somewhat darker. Apex of elytra with fine golden setae or pubescence, elsewhere glabrous or very sparsely pubescent.

Head with distinct but not large or dense punctures. Rostrum convex and with finer punctures than on head in one sex, gently concave and with coarser punctures than head in the other ; in both with a short median line. *Prothorax* not quite twice as long as wide, sides gently incurved to middle ; with

clearly defined but rather small, irregularly distributed punctures, denser on basal half than apical, and clustered together in a small spot on each side of the middle, slightly closer to base than apex. *Elytra* a little more than twice the length of prothorax; striate-punctate, punctures rather large but shallow; interstices wider than striae, with numerous small punctures, third increasing in width near base, the widened portion granulate-punctate in one sex, with simple punctures in the other; posterior declivity with almost regular rows of small granules in one sex, in the other with several much more conspicuous granules or small tubercles on the third and fifth interstices. Front *tibiae* rather thin and finely serrated, the others stouter, of different shape, and rather coarsely serrated. Length 6¼-6½ mm.

Hab.—N.S. Wales: Ropes Creek (Macleay Museum), Galston (A. M. Lea).

In addition to the ordinary punctures the whole of the upper surface, in suitable lights, appears to be very finely shagreened. The sexes are readily distinguished by the base and apex of elytra, but I am unable to state which is the male.

Tomicus acanthurus, n. sp.

Pale reddish castaneous, parts of under surface almost flavous; mandibles, elytral tubercles and margins, knees, and sutures of metasternum more or less blackish; prothoracic granules and middle of disc more or less infuscate. Clothed with rather long, and not very sparse, pale hair or thin setae.

Head with punctures of irregular size and distribution; with a very feeble median carina. Scape about twice the length of funicle, and distinctly longer than club. *Prothorax* moderately transverse, apical half semicircular; with irregularly distributed punctures, denser on middle of disc than elsewhere; apical half with transverse series of narrow granules. *Elytra* with small but distinct punctures, irregularly distributed; posterior declivity commencing before the middle, each side of it with three rows of large shallow punctures; its outer boundaries marked by an irregular double row of large conical granules, or small tubercles, each of which is marked with a puncture containing

a hair or seta at its tip. Front *coxae* almost touching; front tibiae scarcely, the hind pair distinctly, but irregularly, serrated. Length 7½ mm.

Hab.—Queensland: Cairns.

The only specimen now before me was obtained from Mr. E. Allen or Mr. H. Elgner, and its middle tibiae are missing. There is, however, a specimen from Cape York in Mr. J. A. Anderson's collection. The elevations of the prothorax are, perhaps, not properly called granules, each appears as a small acute ridge, distinctly separated from its fellows, but so placed as to appear a remnant of a transverse blade-like ridge; in the middle of the extreme apex they are more distinct and closer together, giving it a serrated appearance.

Among the Australian Scolytidae readily distinguished by its large size, robust form, and conical tubercles margining the posterior declivity. The only species previously referred to *Tomicus* from Australia is *truncatus* (*Amasa thoracica*), which is a much smaller species, with the posterior declivity abrupt and not margined with tubercles.

Xyleborus compressus, Lea.

The elytra of this species are usually very little darker than the prothorax. On their posterior declivity there are two small subconical tubercles on the third interstice on each side. The species occurs in Queensland, Victoria and Tasmania, as well as in New South Wales.

Xyleborus parvus, Lea.

There are a few small granules on each side near the apex of the elytra of this species.

Xyleborus hirsutus, Lea.

There are numerous small acute granules on the posterior declivity of this species; and the elytra, instead of being once and one-fourth the length of the prothorax, as in the original description, are fully once and one-half its length.

The species occurs in Queensland, as well as in N.S. Wales; and Mr. C. French, junr., has obtained numerous living specimens at Melbourne, in logs from the Malay Peninsula.

Xyleborus funereus, n. sp.

Deep black and shining, under-surface somewhat diluted with red; antennae and tibiae somewhat flavous, rest of legs darker. With rather long and more or less erect yellowish setae or hairs, somewhat irregularly distributed.

Head with numerous punctures of moderate size, but not sharply defined. *Prothorax* about as long as wide, apical two-fifths strongly granulate-punctate, middle of disc with small dense punctures, elsewhere almost impunctate. *Elytra* not twice the length of prothorax; with regular rows of distinct, but not large punctures; posterior declivity with small scattered granules, becoming small conical tubercles on the third interstice. *Tibiae* strongly curved and serrated outwardly. Length 3½ mm.

Hab.—Queensland: Cairns (E. Allen).

The deep black colour of the entire upper surface will readily distinguish from all previously described Australian species; in build it is much like *compressus*, but there are three conical granules on the third interstice, instead of only two. A second but much smaller black species occurs in Queensland, but, as it is represented before me by a single broken specimen, it is not now described.

Cryphalus compactus, n. sp.

Of a rather dingy flavous, granules somewhat darker. Clothed with very fine pale pubescence, and with fine suberect setae.

Prothorax not much wider than the length down middle; with dense minute punctures; with numerous rather rough granules, more or less transversely arranged. *Elytra* about once and one-half as long as wide; with dense minute punctures, and feeble remnants of striation. Length 2 mm.

Hab.—Queensland: Port Denison (Australian Museum).

A pale robust species. The granules occupy almost the entire width of the prothorax at apex, but then they disappear hindwards from the sides, and terminate in the middle before the base is reached, so that in front the space occupied by them is rounded, and behind triangular.

A specimen from the Upper Ord River may represent a variety of this species; it differs from the types in being slightly narrower, with the elytral setae more pronounced.

Cryphalus subcompactus, n. sp.

Piceous-black; appendages reddish-flavous, tarsi still paler. Clothing of the same nature as in the preceding species, but darker.

Prothorax almost as long as wide; with dense minute punctures; and dense angular granules, more or less transversely arranged. *Elytra* almost twice as long as wide, with dense minute punctures, and very fine but fairly distinct striae. Length $1\frac{1}{2}$-$1\frac{2}{3}$ mm.

Hab.—N.S. Wales: Galston (D. Dumbrell), Sydney (A. M. Lea).

The length is about that given for *wapleri*, but the elytral clothing and sutural stria are not as described in that species. The prothoracic granules are rather more closely placed than in the preceding species, and terminate hindwards rather more abruptly; the elytral striae are also rather more noticeable, although very finely impressed.

An immature specimen which belongs to this species is in general appearance very close to two European species which I have under the names of *piceae* (Ratz) and *asperatus* (Gyll), but is slightly more compact, with the clothing slightly different.

Cryphalus melasomus, n. sp.

Black; tibiae more or less diluted with red, tarsi and antennae flavous. Clothed with fine dark pubescence and fine suberect setae.

Prothorax moderately transverse; with dense and fairly distinct punctures; apical half, except at sides, with coarse angular granules, more or less transversely arranged. *Elytra* rather more than twice as long as wide, with rows of small but distinct punctures in fine striae, the striae rather stronger towards sides than suture. Length 2 mm.

Hab.—N.S. Wales: Clarence River (G. Compere), Wollongong (A. M. Lea).

Much smaller and darker than *pilosellus*, with the legs not entirely pale, prothorax with coarser punctures and sparser granules, etc. The uniformly black prothorax distinguishes from the description of *sidneyanus*, and the larger size and sutural stria not profoundly impressed at base from the description of *wapleri* (the colour of which is not mentioned). The clothing is much as in the preceding species, except that the fine pubescence is slightly longer and more noticeable. In general appearance it is much like the European *binodulus*, but is more compact, punctures coarser, with the striation more pronounced and regular.

The granules are almost entirely confined to the sloping apical portion of the prothorax, and, from above, the space they occupy appears to be almost circular. On one specimen the club is concolorous with the rest of the antennae, on the other it is somewhat darker.

Cryphalus setistriatus, n. sp.

Black; appendages flavous, knees and club darker. Clothed with fine greyish pubescence, the elytra with short, stout, suberect setae, in regular series.

Prothorax about as long as wide; with small dense punctures, and with numerous somewhat angular granules, more or less transversely arranged. *Elytra* more than twice as long as wide; with regular rows of distinct punctures in fine striae. Length 1½ mm.

Hab.—W. Australia: Rottnest Island (A. M. Lea).

The granules are smaller, more numerous and less angular than in any of the preceding species, and their transverse arrangement is less conspicuous; the punctures are also more noticeable. The elytral setae in this and the three following species are very different to those of the three preceding species.

Cryphalus tricolor, n. sp.

Blackish-brown, prothorax reddish, appendages flavous. Clothed with very fine whitish pubescence, the elytra in addition with very short, stout, suberect setae, in regular series.

Prothorax almost as long as wide, with small dense punctures;

apical half with numerous small angular granules, of which those in front form three almost perfectly regular rows. *Elytra* about twice as long as wide; with dense minute punctures, and with larger (but still small) punctures in regular series. Length 1½ mm.

Hab.—Queensland: Cairns (E. Allen).

The reddish prothorax readily distinguishes from all other species known to me.

The elytral setae are very short, and from above appear almost as if scales. The granules on the middle of the prothorax have a somewhat regular arrangement, but not so complete as the three apical rows. There are faint traces of striae at the base and sides of elytra, but true striae are quite absent from the disc, although the rows of punctures are quite regular.

Cryphalus striatopunctatus, n. sp.

Piceous-black; appendages flavous, club darker. Indistinctly clothed with greyish pubescence; the elytra in addition with regular series of rather short and fairly stout setae.

Prothorax about as long as wide; with rather small dense punctures; apical half, except at sides, with numerous small angular granules, scarcely transversely arranged. *Elytra* rather more than twice as long as wide; with regular rows of (for the genus) comparatively large punctures, becoming smaller posteriorly, and in rather lightly impressed but quite distinct striae. Length 1¼ mm.

Hab.—N.S. Wales: National Park, Sydney (A. M. Lea).

Distinguished from *setistriatus* by the more convex elytral interstices, with larger punctures in the striae; in shape also it is slightly less elongate.

One specimen is entirely flavous (except that the granules are somewhat darker), but this is probably due to immaturity.

Cryphalus tantillus, n. sp.

Brownish-flavous, appendages flavous. Clothed with fine greyish pubescence; elytra in addition with short, stout, erect setae, in regular series.

Prothorax feebly transverse; with dense minute punctures; apical half (except at sides) with small, dense, angular granules, feebly transversely arranged. *Elytra* more than twice as long as wide; with regular rows of distinct punctures, in feeble striae; the interstices with minute punctures. Length 1 mm.

Hab.—N.S. Wales: Richmond River (A. J. Coates).

The smallest of the family recorded or known to me from Australia, and with the elytral setae beautifully regular. In general sculpture it is much like the preceding species, except that the punctures and striae are rather less strongly impressed.

Cryphalus pilosellus, Er.

A fairly common Tasmanian species, varying in length from 2 to $2\frac{2}{3}$ mm. Numerous specimens (apparently immature, as they are much paler than specimens taken at large) were taken from beneath bark of the prickly box (*Bursaria spinosa*).

Hylesinosoma, n. g

Head wide, not entirely concealed from above. Eyes narrow and finely faceted. Scape more than thrice the length of funicle, and slightly shorter than club; funicle seven-jointed; club with three very conspicuous joints, of which the first two are strongly produced on one side. Rostrum (including mandibles) almost thrice as wide as long. *Prothorax* moderately transverse, base bisinuate. *Scutellum* small. *Elytra* cylindrical, subcordate. *Prosternum* short. *Metasternum* slightly longer than the following segment; episterna wide at apex. *Abdomen* with first segment rather more than twice as long as second or fifth, each of these slightly longer than third or fourth. Front *coxae* separated about half the length of front femora, middle coxae a little more widely separated, hind pair almost touching; femora rather stout and edentate; tibiae coarsely serrated; tarsi shorter than tibiae.

This genus is proposed to receive *Hylesinus fici*, wrongly referred to *Hylesinus* on account of its very deceptive resemblance to several exotic species of that genus. In the figure accompanying the original description of the species the funicle is

figured as two-jointed, and that is certainly its appearance under a Coddington lens, but under a quarter-inch power seven joints may be seen, the first small and almost (from above, quite) concealed by the scape, the second fairly distinct, and then five very closely connected and strongly transverse joints, regularly and conjointly increasing in width to apex. The claw joint has a minute basal piece, so that the tarsi are really five-jointed. It certainly does not belong to *Hylesinus*, which has a subsolid club, and it certainly belongs to the *Phlaeotribi*, as defined by Leconte, who does not mention the number of joints of the funicle. Chapuis gives as a sub-family character of the *Phloeotribidae* the funicle as five-jointed. On the whole it seems best to refer the genus to the vicinity of *Phloeotribus*.

Hylesinus cordipennis, n. sp.

Black or almost black, antennae and tarsi reddish, knees and tips of tibiae more or less diluted with red. Clothed with very fine pubescence, longer and more noticeable about mouth and on coxae than elsewhere.

Head with very dense and rather small punctures, face gently concave. *Prothorax* about as wide as the length down middle, but much shorter at sides, sides strongly rounded, base with a strong scutellar lobe, a very shallow curved impression on each side of base; with very dense and rather small punctures; towards sides granulate-punctate. *Elytra* cordate; striate-punctate, punctures deep and suboblong; interstices flattened, very densely punctate, towards base granulate, and everywhere wider than striae. *Under surface* with dense, clearly-defined punctures. Front *coxae* separated about half as much as the middle pair; tibiae dilated to apex and rather strongly serrated. Length 3-3¼ mm.

Hab.—Queensland: Cairns (J. A. Anderson).

Under a quarter-inch lens the funicle is quite distinctly seven-jointed, the first being fairly long, the others strongly transverse and close together, but the second longer than the others. The joints of the club have oblique and fairly distinct sutures, and the club itself is somewhat darker than the rest of the antennae.

This and the following species are both larger than *porcatus* (described as $2\frac{1}{3}$ mm. in length), and both have the elytral interstices considerably wider than the striae, and with very different clothing; *fici* (erroneously referred to *Hylesinus*) has a very different club.

Hylesinus interstitialis, n. sp.

Colour much as in preceding species, except that the reddish parts are rather less conspicuous. Upper surface glabrous, except for some short, pale, stiff setae on apical half and sides of elytra; face with fine pubescence; under surface and legs with moderately dense and not very short pale pubescence.

Head with very dense and rather small, but round and clearly-defined punctures. *Prothorax* about once and one-third as wide as long, sides strongly rounded in front, but almost parallel on basal half, base feebly bisinuate; basal half with a very feeble median line; sides, except at apex, very narrowly margined; with dense, round and clearly-defined, but not very large punctures. *Elytra* oblong-cordate, apex conjointly mucronate; striate-punctate, punctures more or less round and confluent, causing the interstices to appear finely crenulated; these flattened, much wider than striae, and with numerous clearly defined punctures. *Under surface* with dense but partially concealed punctures. Front *coxae* separated almost as widely as the middle pair; four hind tibiae coarsely serrated. Length $3\frac{1}{2}$-5 mm.

Hab.—Queensland: Cairns (Macleay Museum, H. Hacker, E. Allen).

Although, at a glance, close to the preceding species, differs from it in the shape, clothing, punctures, antennae, separation of front coxae, etc.

The funicle has the first joint stout and about half the length of the rest combined, the second is fairly distinct, but the others are so strongly transverse and close together that it is difficult to decide as to their number, more especially as the apical one is closely joined to the club. Under a quarter-inch lens, however, and in certain lights, the funicle can certainly be seen to be seven-jointed. The scape is the length of the

funicle. The club is finely pubescent; distinctly longer than the funicle and oblong-elliptic; it is composed of three joints, with strongly oblique sutures; but these are so very indistinct that at first the club appears to be solid, and it is only in certain lights and from certain directions that the sutures can be seen at all.

Phloeopthorus acaciæ, n. sp.

Dark brown, sometimes almost black; antennae (club darker), tibiae and tarsi reddish. Clothed with short, stout, pale setae, more or less closely applied to the derm; the elytra in addition with regular rows of short, stiff, semi-upright setae.

Head with moderately dense but partially concealed punctures. Scape stout, somewhat shorter than funicle; funicle with first joint stout, curved at base and longer than any of the others; second slightly longer than third; club distinctly longer than funicle, about twice as long as wide, rather pointed, sutures distinct and not oblique. *Prothorax* about once and one-half as wide as long; with dense but more or less concealed punctures; sides rather strongly rounded; base strongly bisinuate. *Elytra* elongate-cordate, no wider than prothorax and about twice as long; striate-punctate, striae and punctures in same partially concealed; interstices wider than striae, and with numerous punctures, at base each separately raised, except the sutural one on each side. Second segment of *abdomen* about half the length of first, and not much longer than third. *Tibiae* dilated to apex. Length 2-2¼ mm.

Hab.—Tasmania.

Abundant in dead and dying wattle trees, just beneath and in the bark. The elytra are usually as dark as the rest of the upper surface, but are often more or less reddish; the femora and coxae are also sometimes reddish. Seen from in front the raised interstices at the base of the elytra appear like a fine curved saw, with a gap at the suture. The funicle under a quarter-inch power is quite distinctly five-jointed, the second to the fifth joints being each dilated to apex, so that each is quite distinctly visible.

Ficicis, n. g.

Head wide, not concealed. Eyes thin, feebly curved, about as long as front tibiae, facets not very small. Rostrum short and stout. Scape stout, distinctly longer than funicle; funicle seven-jointed, first joint stout, about as long as three following combined, and feebly or not at all dilated to apex; club longer than funicle, but not twice as long as wide, with distinct straight sutures, apical joint small. *Prothorax* transverse, base bisinuate. *Scutellum* small. *Elytra* cylindrical, apex rounded. *Prosternum* extremely short in front of front coxae. *Metasternum* about as long as the following segment; episterna greatly narrowed in front. *Abdomen* with first segment almost as long as three following combined, second as long as fifth, and distinctly longer than third or fourth. Front *coxae* distinctly separated, the space between them about equal to the width of club, middle pair more widely, hind pair rather less widely separated; femora rather short, edentate; tibiae increasing in width to apex serrate at and near apex; tarsi rather thin.

In the Australian fauna this genus may be placed next to *Hylesinus*. In general appearance the two species described below are remarkably close to *Phlaeopthorus acaciae*.

Ficicis varians, n. sp.

Colour variable. Clothed with short stout pale setae, denser and finer on the abdomen than elsewhere; on the elytra stouter than elsewhere, suberect and in regular series.

Head regularly convex, with very indistinct punctures. *Prothorax* about once and one-third as wide as long, apex about two-thirds the width of base; with dense and fairly large, but not deep, punctures. *Elytra* about twice the length of prothorax, and no wider; striate-punctate, punctures large, deep, and close together; interstices narrower than striae, and finely serrated; base, except at suture, narrowly raised. Length 2-2 1-6th mm.

Hab.—N.S. Wales: Gosford (from dying trunks of cultivated fig, W. B. Gurney), Sydney (A. M. Lea).

One specimen has the head, prothorax, scutellum and femora black, with the elytra and under surface dark reddish-brown,

and the tibiae, tarsi and antennae (excepting club, which is dark) more or less reddish. Others are almost entirely flavous-red, or entirely dark-red. Others are more or less reddish, with the prothorax (except at its apex) and head darker, and femora darker or not. Seen from the sides, each elytral interstice appears to be finely serrated, the serrations being caused by granules, some of which become more conspicuous towards the apex; the punctures, though of large size, are somewhat obscured by the clothing.

Ficicis koebelei, n. sp.

Reddish-brown or black, scape funicle, and tarsi paler. Clothed with short, stout, pale setae; depressed, except on elytra, where it forms regular series; on abdomen denser and finer than elsewhere; prothorax and elytra, in addition, with very fine indistinct pubescence.

Head regularly convex, with very minute and indistinct punctures. Rostrum concave in middle. *Prothorax* about once and one-half as wide as long, apex slightly more than two-thirds the width of base; with very dense punctures, rather small on disc, but becoming larger and subgranulate towards sides and apex. *Elytra* about twice as long as prothorax, and just a trifle wider; striate-punctate, punctures large, but partially concealed; interstices narrower than striae, granulate-serrate suture depressed at base, but rest of base not finely raised. Length 2 1-3rd mm.

Hab.—Queensland (Henry Hacker), Barron Falls (A. Koebele).

Two specimens are almost or quite black, another is blackish with the elytra somewhat paler, and three others are nowhere (except the eyes) black. Seen from the sides, the granules of the elytral interstices cause these to appear very finely serrated, as in the preceding species. But it differs from that species in being slightly larger and wider, with the elytral clothing of two kinds, with the base not raised, and the prothoracic punctures different.

Two specimens from Cairns may represent the other sex of this species, or possibly a distinct one. They differ in having no elytral granules, and consequently the serrated appearance

of the interstices wanting; the finer pubescence of the prothorax and elytra is also more conspicuous. The club is also pale, but this may be a variable character.

Acacicis, n.g.

Head rather small, visible from above. Eyes narrow, with rather fine facets. Rostrum extremely short. Scape rather stout, shorter than funicle; funicle seven-jointed; club stout, slightly longer than funicle, sutures rather indistinct. *Prothorax* transverse. *Scutellum* absent. *Elytra* not much longer than wide. *Prosternum* very short, and not continued in front of coxae. *Metasternum* very short. *Abdomen* slightly wider than long; first segment (excluding its triangular intercoxal process) the length of fifth, and but little longer than second, second not much longer than third or fourth. Front and middle *coxae* very widely separated, hind pair almost touching; femora rather short, edentate, tibiae dilated and finely serrated towards apex; tarsi rather thin, claw joint about equal to the combined length of the others, and with rather strong claws.

In the Australian fauna this genus may be placed next to the preceding, from which, and from all others, it may be distinguished by the following combination of characters:—Very widely separated front coxae, with hind pair practically touching[1]; seven-jointed funicle, and club with indistinct sutures.

Acacicis abundans, n. sp.

♂ (?) Black or blackish-brown; scape, funicle and tarsi reddish; rest of legs and part of elytra sometimes reddish. Clothed with rather dense, greyish (or brownish) setae or pubescence, suberect on elytra.

Head without distinct punctures. *Prothorax* about once and one-third as wide as the length down middle, but about twice as wide as the length of sides, base with a wide scutellar lobe; extreme apex with a few small granules in middle; with dense and small, partially concealed punctures, becoming larger and more distinct towards apex and sides. *Elytra* briefly cordate,

1 The three coxae on each side, however, are practically touching, owing to the extreme brevity of the sterna.

very little wider than prothorax; striate-punctate, punctures fairly large, but partially concealed; interstices with numerous granules, of which the most conspicuous is on the fifth interstice, forming a preapical callus; interstices separately raised at base. Length $1\frac{1}{2}$--$1\frac{3}{4}$ mm.

♀ (?) Differs in having the elytra more convex and cylindrical, without granules, except the preapical callus, and a few at base caused by the elevation of the interstices there; the striation rather feeble, with small punctures, and the interstices with numerous small punctures.

Hab.—Tasmania (Aug. Simson, No. 2074), Hobart, Mount Wellington, Bruni Island, etc.; Victoria: Emerald (A. M. Lea).

A small subglobular species, that may be taken in abundance on dead and dying wattle trees, especially when newly barked. The elytra, especially in the male, are frequently diluted with red, except at the base and sides. The funicle has the first joint stout, briefly elliptic, and longer than any other, second about half the length of first, and about the length of third, third to seventh gradually increasing in width, very close together and closely joined to club. The six apical joints are so close together that it is impossible to distinguish them under a hand lens, and even under a compound paper a suitable light is very necessary. On the male there are eight rows of conspicuous granules on each elytron, of which the first four rows are short and subbasal, the fifth is slightly longer, and the sixth and seventh are longest of all, and curve round so as to join in with the preapical callus of the fifth: the seventh and eighth are also rather short, but are not subbasal.

A second and smaller species from New South Wales is known to me, but only from the female, so is not now described.

Brenthidæ.

Ectocemus 10 maculatus, Montr.[1]

ruficauda, Bates.

var. *pterygorrhinus*, Gestro.

In many Australian collections I have seen specimens of a remarkable Brenthid standing under the name of *E. ptery-*

1 Ann. Soc. Agr. Lyon, vii., i., p. 37.

gorrhinus; but these specimens do not agree with Gestro's description. I wrote about the species (my 10804) to Dr. Gestro as follows:—"This species is in several collections as *pterygorrhinus*, but it does not agree with your description, as the prothorax is red, and the maculae are never ten in number, but eight or nine, of which three or four are together beyond the middle and never more than two at the apex (in your description you say three)." In reply he stated: "Nearly all our Brenthids are with Prof. Senna, to whom I sent your specimens. Senna says your 10804 is *Ectocemus 10 maculatus*, Montr." In a later letter he confirmed this identification, and stated: "I think that *pterygorrhinus* is simply a colour var., and in consequence the two cannot be separated, *pterygorrhinus* is darker."

In recently examining twenty-four specimens of the species I found that one of them has three apical spots on each elytron, but the one usually missing (at the junction of the fourth, fifth and sixth interstices) is very small. Several specimens sent to me recently by Mr. Elgner from Cape York have the prothorax quite black, but in all the others it is of a more or less dark red. Queensland specimens vary in length from 16 to 28 mm. (including the rostrum).

In Masters' Catalogue of the New Guinea beetles, *ruficauda* Bates (1394) is given as a synonym.

Orychodes digramma, Boi.[2]

This species (originally described from Dorey) occurs abundantly in the vicinity of Cairns. In appearance it resembles an *Ectocemus*, but has a stout spine directed at right angles to its length, immediately behind each eye; the spine, however, is usually very indistinct in the female. The length (including the rostrum) varies from 9 to 20 mm. I have to thank Dr. Gestro for the identification of the species.

CHRYSOMELIDÆ.

Sub-family, *Chrysomelides.*

The late Mr. Jacoby's paper in Ann. Soc. Ent. Belge, 1898, was unknown to me at the time I drew up the descriptions of

2 Voy. Ast., II., p. 310, t. vii., f. 23.

some species of this sub-family, which appeared in the Proceedings of the Aust. Assn. for the Advancement of Science. Although my paper was "read" in 1902 it was prepared some time before then, and before starting on it I had seen no references to his paper in the Zoological Record.

For several of the species[1] the locality "Richmond" given by Jacoby is certainly wrong. Richmond is a town on the Hawkesbury River, near Sydney, and I have seen no species of most of the genera referred to so far south. The locality should almost certainly have been Richmond River, where numerous species of the genera referred to are to be obtained.

Phyllocharis gracilis, Jac.

Redescribed by me as *P. fici.*

Stethomela foveipennis, Jac.

This is a synonym of *poroptera*, Baly.

Stethomela fulvitarsis, Jac.

My *cupripes* appears to be close to this species, and is perhaps only a variety of it; it differs from Jacoby's description in having the antennae without the basal joint piceous above; the tarsi, except the claws, entirely dark, the under surface not piceous, and the upper surface wihout a trace of green.

Richmondia camelus, Jac.

This species was previously described by Blackburn with doubt as a *Spilopyra (olliffi*, Blackb.). The species must therefore now be known as *Richmondia olliffi*, Blackb.

Augomela ignita, Jac.

This is the same species that I subsequently described under the same name (as supposed by Blackburn), although Jacoby's types were larger than mine. There is therefore no need to change my name as being already in use.

1 *Phyllocharis gracilis, Chalcomela variegata, Augomela ignita, Platymela blackburni* and *Richmondia camelus.*